

Quality enhancement: governing student learning

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This article provides a critique of current debates about what quality enhancement is for and what it does. It outlines a conceptual framework drawing on different understandings of quality assurance and quality enhancement in higher education, which helps to refine the role of quality enhancement in improving student learning. The paper analyses existing debates on emerging trends in quality assurance and enhancement, particularly within European HE systems, with reference to the relationships between research, education, social and economic cohesion, the changing nature of student representation, and learning analytics. A new balance between assurance and enhancement could reconcile ways of thinking generated by higher education, knowledge structures emerging in research communities within the universities, and methods of enhancing learning and teaching which enable a degree of student-led demand.

Keywords: quality enhancement, quality assurance, student learning, governance

Introduction

Quality structures have been central to higher education since the 1960s, as a means of ensuring educational standards within and across disciplines, enabling benchmarking at a disciplinary, institutional and state level, and evidencing for accountability. Diverse interpretations of how best to *do* quality have developed and continue to develop (Brown, 2004). As both cause and consequence of the cycle of debate about the quality of higher education learning and teaching, quality assurance mechanisms have emerged across the world (Harvey and Newton, 2007). These mechanisms are typically established via a range of professionally operated, in-country national bodies, which oversee the review process and curate evidence about the standards of a nation's higher education sector (El-Khawas, 2013). The positioning of these bodies is unstable. Over time their focus may vary from independent

agency to one more closely aligned with centralising forces associated with accreditation, or from arm's length body to one more explicitly tied to government educational agendas.

Many factors influence how notions of assurance as primarily audit and assurance as primarily enhancement are realised inside, outside or alongside the quality bodies. Those factors include: the extent of government control over universities; emphases emerging from within the quality professional bodies; the demands of ensuring that standards of degree-level abstract thinking and practice align with industrial and professional needs (especially in Medicine, Law, Dentistry, Architecture and Engineering); institutional missions to produce specialist research and generalist educational levels of attainment; and discourses about the place of students within higher education (HE).

This article provides a critique of current debates about quality enhancement and outlines a conceptual framework drawing on different understandings of quality assurance and quality enhancement in HE. This helps to refine the role of quality enhancement in improving student learning. The paper analyses existing debates on emerging trends in quality assurance and enhancement, particularly within European HE systems, with reference to the relationships between research, education, social and economic cohesion, the changing nature of student representation, and learning analytics.

Differentiating quality assurance and quality enhancement

The implementation of quality structures has been crucially influenced by debates in research and policy about:

how best to demonstrate to diverse audiences that there is a high quality university learning experience. Bureaucratisation in mature quality procedures may have dysfunctional effects and work against good quality educational experiences, calling for a fresh focus on student learning;

the best approach to *accountability that enshrines improvement* is a state-determined set of standards and performance criteria, applied to all institutions, more effective than subject level assessments, which depend predominantly on disciplinary professionalism in terms of approaches to teaching excellence and student learning?

what methods work best to make things better;

whether educational quality systems should provide retrospective

assessment, continuous prospective development or a balance of both;

what those who design, oversee, and/or take part in the quality processes say they are trying to achieve for teaching and learning through educational audit.

Quality assurance and quality enhancement and their interactions are thus dominant and contested ideas in higher education.

Conceptualising enhancement

Quality enhancement is a troublesome, relatively unstable idea. As discussion about assurance and enhancement has intensified, clearer definitions of enhancement as a concept have emerged. In a recent review of enhancement in England, Roger Brown noted:

Quality Enhancement here describes the improvement of pedagogy through information and ideas from research, benchmarking, quality assurance, and other exchanges of experience and practice.

Brown (2014:2).

This conflates enhancement with educational development. Educational development is central to enhancement, but is not all that is meant by *quality* enhancement. Concepts of enhancement in educational development have tended (in England at least) to be based around small-scale, short-term projects, whereas quality enhancement requires more sophisticated coordination (Brown, 2014:12).

Acknowledging convergence and divergence in debates concerning assurance and enhancement, Newton suggests that

Quality Assurance is taken to be a deliberative process to check, evaluate, and make judgements about quality and standards. It may also indicate directions for enhancement and improvement. Quality enhancement is viewed as a deliberate process of change that leads to improvement.

Newton (2013:9).

In this, quality assurance is synonymous with the process of evaluative audit, as opposed to enhancement, where audit is a procedure of summative ‘checking’ that standards are being met (Harvey, 2011:15) and enhancement is characterised through learning and teaching change *for the better*.

Quality enhancement here is defined in terms of process, aim, how it functions, how it is perceived, what underpins it, and what characterises it most in terms of time and space. It is a *process* of formalised, formative development that systematically encompasses: academic teacher maturation; disciplinary engagement in curricular level debates (rather than individual teaching activities); learning and teaching regime improvement and subsequent implementation of change; and management of the broader institutional environment. Its ultimate *aim* is to improve student learning outcomes in various categories, including learning gains, social integration, and perception of satisfaction. It *functions* within national legislative frameworks which coordinate educational endeavours that operate across the vertical lines of disciplinary needs and institutional autonomy, and also define the limits of academic freedom. It needs to be *perceived* as cost-effective and able to demonstrate that it is robust and worthwhile to different spheres of influence (quality professional, academics, students and external stakeholders). It is *typically underpinned* by: the fostering of formal, constructive critique of practices; an acceptance of the complexity of student learning; and trust. It is *commonly characterised* in terms of time (retrospective/prospective) and space (holistic/divided) and associated trust/mistrust within the spaces.

Time

In the fundamental respect of *time*, assurance and enhancement tend to signify different temporal frames of reference, even when this is not the intention of their respective proponents. The two categories seem to privilege time differently. One feeds back, focusing on what *has been done*, *whether it is good enough and could be done better* within institutional, sector-wide, or nationally agreed parameters. The other feeds forward, emphasising *what should be done to go beyond good enough to excellence and innovation* (including the fostering of institutionally relevant, collaborative creativity for learning gains through curriculum design, teaching practice reform, and student engagement socially and intellectually). Because of this they are arguably intrinsically linked. Enhancement cannot occur from a robust starting point without initial evaluative reviews that include audit.

Space

The spatial manifestation of enhancement in the quality discourse is also important in terms of how it is conceptualised. This discourse tends to divide into two broad categories which express quasi-essential presumptions of what makes for a good quality system: either

integration of assurance and enhancement in one space or separation of assurance and enhancement into two spaces. In terms of the relationship with these respective spaces, assumptions diverge in terms of the levels of trust/ sincerity of the different actors within the spaces. Where enhancement is the focus in each of these categories, they have the method underpinning enhancement review in common, one which emphasises the relative merits of peer-review, self-assessment, external evaluation and student engagement as necessary if not sufficient conditions for engendering improvement (See d'Andrea and Gosling, 2005; Eaton, 2014; Napier *et al*, 2014).

Integrating assurance and enhancement

This category emphasizes the integrated nature of assurance and enhancement. It stresses that they work as part of a continuum to improve the quality of university teaching and learning (Elassy 2012; Lomas, 2004). This is particularly the case in terms of those quality reviews which acknowledge and embed the dialogic, formative approach to educational development over the summative, documentary evidence collection aspect of the review process. Arguably, this is most observable within quality systems which prioritise subject assessments and evaluations (rather than on state-based criteria), such as those found in the pioneering quality systems in the Netherlands and Denmark (Amaral, 2014), subsequently Latin America (Lemaitre, 2014), and now in Hong Kong and some American institutions (Massy, 2010).

Here quality assurance covers both teaching quality audit and teacher/curricular development, accepting that an overall intention of teaching enhancement is integral to the academics in the disciplines. It most tangibly occurs through a dialogic process experienced as a core component of a quality system's external visitation process. The strength of this system lies in its valuing of educational development through structured conversations which elicit the range of reasoning and evidence academics use to inform their teaching and curricular practices (Massy, 2010). It values trust over control. It also allows for subject-based emphases to play a role in the qualitative judgements about their own performance in a manner relevant to their learning and teaching regimes. An example of this is the European quality group EQ Arts. This group enables Art and Design Schools across the European Community to address quality processes in a manner more reflective of the typical studio-centred learning and teaching environments on which they depend. These environments do not easily correlate with the traditions of much university education that have, through scale, been the focus of quality enhancement via assurance routes.

The weaknesses include: the limited time frame in which the dialogic interventions occur; the lack of cross-fertilisation of teaching practices from disciplines outside of the cognate subject areas; from an institutional perspective, the potential for subject area curricular drift that weakens the link between institutional strategies around learning and teaching and departments at a local level; and from a theoretical perspective, the reductive nature of depending on reasoning and the evidence academics consensually use within their disciplines to determine the quality of educational encounters (which, by their nature, relate to *both* the discipline's needs and broader educational ones). This is particularly pertinent in the case of assessment methods (Massy, 2010, 216) which have proven stubbornly intractable.

Separating assurance and enhancement

Another argument is that quality enhancement represents a qualitatively different discourse. Quality assurance makes judgements against identifiable, externally stated threshold criteria whereas quality enhancement is a flexible, negotiated, evaluative model which gives more regulative space to academics (Greaves 2002; Filippiakou and Tapper, 2011). This implies trust in institutions to promote improvements in the quality of learning opportunities (Amaral, 2014). In this case, the debated difference between quality assurance and quality enhancement tends to be that quality assurance is managerial in focus and is not functionally concerned with the quality of university teaching and learning, but quantifies the presumed indicators of good teaching and good management (Biggs 2001), whereas quality enhancement is an improvement process (Cheng 2011).

What unifies these categories of understanding (integrated/divided) is their attempt to manage the experiential, discursive, and value-laden concretization of audit and enhancement as an oppositional binary in the place of higher education. As systems have matured and academic cultures of consent and dissent have been fashioned within them, this binary has polarized research and policy arguments. Thus, despite clear qualitative evidence exploring the benefits of enhancement within quality frameworks, there is still a sense that the summative, regulatory and primarily managerial aspects of quality assurance predominate, philosophically amongst those who oversee quality, and practically in how QA is done throughout institutions and why (Newton, 2013).

Why enhancement's educational capital has grown

It was noted earlier that the relationship between assurance and enhancement is increasingly central in research and policy debates. It

has become clearer that quality assurance is experienced as misaligned, if not antithetical, to both the educational and research orientations of academics and students. This section focuses on these misalignments. The increasing interest in enhancement relates to growing awareness of concerns about the impact of quality procedures in terms of the political ideologies underpinning quality systems implementation and their resultant ownership. There is also concern about the apparent focus on institutional procedures rather than actual teaching practice and the related representation and experience of quality assurance as a top down managerial process, rather than a bottom-up academic led one which resolves disciplinary needs.

Governmental political ideologies and ownership

Quality assurance is often perceived within disciplinary academic cultures as governmentally driven, embedding particular political ideologies, and ultimately acting as an instrument for promoting conformity in academe, which in turn stifles the diversity of teaching and learning (Harvey and Newton, 2004). The use of quality assurance for political purposes is visible through investment in quality structures and how the quality agencies are then used to influence institutional obligations in terms of accountability. Accountability here refers to ‘the obligation to report to others, explain, justify and answer questions about how resources have been used’ (Amaral, 2007:38). This agenda has played out in most European national quality arenas of the last two decades, with accountability commonly defined in terms of economic impact and widening participation for social change (for example, see van Vught and Westerheijden, 1994). Beyond Europe, even in those countries which have attempted to prioritize quality enhancement through assurance, there is a sense of centralising government influences increasingly playing a role, particularly through the introduction of accreditation agencies (Amaral, 2014:27; Lemaitre, 2014).

Ownership of the process is also perceived to be external to the institutions and their academics and students, even where the design of a quality system has emerged from negotiations between agencies and institutional representatives. The provision of pre-determined standards and codes of practice by external Quality Assurance Agencies means that the agencies are seen as both the drivers and machines of assurance, rather than institutions being the drivers. This has been exacerbated as concerns have grown that quality assurance has increased the inequality of funding among higher education institutions (Skolnik, 2010).

Concerns about quality assurance focusing on ‘the wrong thing’

Governments’ wishes to improve widening participation, employability, flexibility, and student experience throughout a degree cycle are not in themselves wrong. For a quality system to be predicated on terms such as enhancement, improvement, and development invests it with a moral quality that is hard to contest (Morley, 2003:49). However, underneath the more idealistic statements there are often bureaucratic and structural practices that seem inefficient and counter-intuitive in terms of educational enhancement, especially in terms of what is assured. Thus, there is an over-emphasis on assuring structural, organisational and managerial processes within institutions rather than directly ensuring the quality of student learning experiences (Newton 2002; Shavelson, 2010; Westerheijden *et al* 2007). In this, quality assurance focuses on checking the implementation of institutional quality mechanisms to decide the institution’s ability to secure the academic standards of its awards.

The management of quality mechanisms is different from the daily practice of teaching and learning in the sense that the latter focuses on an individual’s work and engagement within a disciplinary context. There is a tension between discipline-specific perceptions and ideals for learning and teaching, and quality assurance’s dependence on generic educational themes as the primary orientation of educational standards and accountability (Cheng, 2011). This results in a paradoxical divergence between quality agencies and academics, as traditional quality systems fail to address core elements of the academic endeavour: knowledge creation and student learning (Harvey and Newton, 2006). In this, there is significant concern as to how audit improves the ‘value-added’ (Bennett, 2001; Shavelson, 2010) aspect of student experience, especially in terms of how students develop ways of thinking, doing and making within their disciplinary programmes of study.

Moreover, there is evidence that the focus on organisational and managerial processes has an alienating effect as a ‘box-ticking’ exercise (Hoecht, 2006). Cheng’s (2009) research on the English quality audit culture revealed a tension between academics’ notion of professionalism and the requirements of quality assurance, as academics felt that quality assurance was detached from both their individual academic work and student learning. Additionally, the co-existence of top-down formal assurance processes and bottom-up academic preferences for informal peer review for enhancement purposes challenges the worth of audit based quality cultures (Napier *et al*, 2014).

However this view needs to be qualified. Enthusiasm for implementation of initial improvement review procedures can see increased involvement in enhancement by a wider range of academics

(Rosa, 2014). This suggests the dysfunctional effects of assurance systems are not universal. Yet, it might also reflect the difficulties of maintaining enthusiasm for quality enhancement if it becomes a regularised, iterative imposition. Rosa's (2014) work indicates a substantial shift through enhancement in the first round of implementation in her case studies, but this was not necessarily subsequently sustained.

Either through the original systems' implementation, or as they evolve with additional government interference, the overarching message to academics and the institutions through which they are represented is that not only can they not be trusted, but they will be financially penalised for non-compliance. Such underlying assumptions of distrust and potential punishment lead to imbalance of accountability and quality enhancement in the official goals and practices of the national quality assurance schemes (Westerheijden, 1990). This engenders alienation from the system and its procedures, so that quality assurance actually impedes the improvement of teaching and research. The associated managerial approaches embody negativity about what academics are capable of doing and do, a discourse which undermines the professional commitment of academic staff (O'Neill, 2002). This promotes instrumentalism on the part of a significant number of academics in any given institution, with them being inclined to demonstrate compliance rather than active engagement with quality assurance procedures, impairing the validity of their reports to their institutions (Trow, 1993, 1994).

Key characteristics of an enhancement-led approach

This critique of quality assurance has led to a growing call for quality enhancement of learning and teaching worldwide. Westerheijden (2013) argues that there is a need to combine accountability with enhancement in the evaluation process. Arguably, the enhancement process has two over-arching functions: it provides an institutionally relevant programme of action (which respects cluster differentiation and institutional autonomy), and a collaborative improvement venture across the whole sector. It is not just an audit process which overly privileges procedural checks. To demonstrate the characteristics of an enhancement process we focus on Scotland. Since 2003 Scotland has been at the forefront of adopting an enhancement-led approach to quality assurance, aiming to change the emphasis from assurance to enhancement and encouraging reflective practice within institutions (Saunders, 2014). As devolution has evolved within the UK, this approach emerged as politically unique and very different from the

models applied in the rest of the UK.

For Scottish quality approaches, the orientation has been towards prioritising activities of a specific, nationally determined, educational nature, with assurance providing a ubiquitous ‘back-story’. Saunders (2014:118) has addressed the core aspects of the complex policy instrument in some depth and we briefly outline them here:

Enhancement-led periodical institutional review (ELIR) which includes an advanced audit followed by an enhancement-panel visitation;

Programme, departmental or school level periodic reviews whose processes are designed and owned by the institutions (allowing for institutionally relevant designs, which is especially important as universities restructure internally and the placing of programmes changes for example from singular departments to multiple disciplines within one School);

Student engagement, again designed to fit the institutional context but with a minimum expectation concerning representation of students in the process (normally achieved through identified student representatives);

A series of 2-3 year enhancement themes which establish priorities and milestones on which institutions focus, with an overall sense that they converge over time to encourage long term approaches to enhancement;

A range of approaches to disseminating outcomes beyond the institutions through public information strategies.

It is notable that the system incorporates the Scottish Credit and Qualifications Framework (SCQF), which enables institutions to outline progression of learning through their programmes. The SCQF is considered one of the more effective credit frameworks, the design of which emerged through a significant process of dialogue between external agencies and the Scottish higher education institutions (HEIs) (Allais, 2011; Gunn, 2013). A central tenet of an enhancement-led quality process is that even the more bureaucratic or typological aspects of a quality process need to be founded on significant dialogue.

Since 2003, HEIs have been directed to a schedule of enhancement themes including employability, integrative assessment, research-

teaching linkages, graduate attributes, flexible learning, and developing the curriculum. To foster a collaborative culture the Quality Assurance Agency (QAA) for Scotland facilitates a steering group with representatives from each of the Scottish HEIs. This reports directly to the Scottish Higher Education Enhancement Committee (SHEEC), which is composed of Vice-Principals of teaching and learning as well as student representatives from all of the Scottish HEIs. Arguably, this approach to pursuing national quality enhancement provides:

A gentle, practical, but effective restructuring of standardised and often reductive audit cultures and, in this sense, a counter-cultural challenge to neoliberal interpretations of education (see Saunders, 2014);

A horizontal driver of learning and teaching that cuts across the verticality of disciplinary specificity (which has grown increasingly dominant as a result of changes to the scale, generation and dissemination of research);

An enforced context of collaboration between institutions in an environment where institutional differentiation within one national sector tends to be characterised by competition within and across clusters.

Theoretically, enhancement as described in this model, rebalances power in the quality process from an external agency to an institutionally relevant, internal approach, the sharing of which is facilitated by the quality agencies. Ownership of enhancement is thus perhaps more likely to appeal to the university sector because it repatriates responsibility for the quality of learning process within each institution (Amaral, 2014:23). Designing enhancement so that impact can be addressed and evaluated formally changes the nature of audit, from backward glance to a research design cycle more aligned to academic sensibilities (Newton, 2013). Indeed, it is not hard to see the appeal of an enhancement-led approach to quality. As an ideal it de-emphasises the political ideologies from which quality assurance emerged and changes ownership of the process to a more balanced relationship between quality bodies and the universities. It re-emphasises the importance of learning gains through sharing teaching innovation, accepts that audit is still an essential part of the process but allows for an extended timeframe in which enhancement can occur.

Emerging trends for governing quality enhancement

The enhancement-led quality framework as outlined within the Scottish context above identifies how improvement can be fostered through institutionally relevant interpretation within a diverse higher education sector. It is, nevertheless, hard pushed to confront changes within the various cultures which create the inner-dynamic of the mission clusters of universities in a given national sector. These changes are relevant to this discussion because current enhancement-led approaches emerged from a context in which the inner operating dynamics of institutions varied. Abstracting principles from a currently functioning, previously negotiated, enhancement-led approach and exporting them to higher education systems in different countries is likely to result in unwanted outcomes. Any enhancement-led quality framework thus needs to take into account the following substantive internal shifts in the operationalisation of universities:

Changes in the nature of academic work

Academic workforce planning is changing in the light of systemic stresses caused by two central trends: changes to knowledge production; and globalisation. In terms of the former trend, as well as the way new knowledge is being produced, state-wide dilemmas are also viewed as requiring more than is resolvable by a single discipline. This means that increasing specialisation co-exists with interdisciplinary working, with generic educational outcomes being emphasised. These processes are leading to significant changes in how institutions manage staff, most clearly seen in three ways. Firstly, there is the development of diverse academic pathways, representing research specialisation, research and teaching lectureships, teaching and scholarship tracks, which respond to increasing demands in terms of research, teaching, and community service (Gunn and Fisk, 2013:11-12; Locke, 2014). Secondly, there is growth in contingent staff to undertake given tasks within set, often temporary, periods of the academic year (Popenici, 2013:30). Thirdly, innovations in technology are changing how and where the various constituent groups within the university interact, affecting governance structures, location of academics and their students, and learning and teaching regimes. All three are recognised as problematic in terms of assuring standards and enhancing teaching quality. They exacerbate curricular drift and resultant incoherence in terms of modules across a programme, loyalty to institutional requirements, the loss of research-teaching linkages and diversifying academic pathways.

Indeed, a lesson to be learned from the previous iterations of the quality agenda is that, when possible, some academics will shift the

responsibility of the burdens associated with audit onto their junior peers (Worthington and Hodgson, 2005:98). With the development of teaching-only and teaching and scholarship contracts, an enhancement process centred on an institution-wide, collective endeavour would need to ensure that roles were not negatively distributed in a manner which lowered the status of the enhancement process. Given current research on perceptions of the relative status of the various academic pathways (Norton *et al*, 2013), if quality becomes the preserve of teaching-track academics this will parochialise it and ensure that some academics remain distanced in terms of engagement with quality (Trullen and Rodríguez, 2013). This could weaken the success of any enhancement-focused quality strategy.

Globalisation

In terms of globalisation, the key aspect is that contradictions are being generated through attempts to manage regional education needs and global education demands simultaneously within a given institution. There is escalating complexity in disciplinary knowledge creation and curation, heightened awareness of student needs both domestically and internationally, and the potent paradoxes created by globalised higher education. Together these necessitate a mixed enhancement ‘ecosystem’ that brings local teaching arenas into conversation with a bigger, internationalised, picture. These trans-institutional issues cultivate a sector-wide tension. Effectively, they require some integration of research, teaching, community service, particularly in terms of knowledge exchange and social cohesion, and leadership at the same time as specialised careers emerge to enable universities to fulfil the demands now being made of them.

Quality enhancement: the next generation of research

The current literature on quality enhancement and emerging trends in universities make it clear that further research is needed to inform policy and practice. Key areas to be addressed include: more effective links between teaching enhancement strategies and research agendas; a more robust understanding of the impact of student engagement in enhancement systems; learning analytics; and technological innovation.

Improving the impact of assurance through enhancement

For enhancement to grow as a quality mechanism it must be designed to accommodate the conflicts between institutional and external state agendas. An enhancement-based quality process must oversee, support, and respond innovatively to the relationships between research,

disciplinary teaching, broader educational aims, and service, in increasingly inter-cultural arenas. For example, attempts to resolve the tensions caused by competing demands on institutions were observable during the period of the Scottish Enhancement Theme (2011-13) 'Graduates for the 21st Century'. This theme occurred at the same time as institutions and government were engaging with outputs from projects about 'learning cities' and rural/urban divides, as an aspect of globalised networks of university-centred, externally funded research activity (Campbell, 2009; Duxbury and Campbell, 2011; Morgan, 2009; Yang, 2012). There was no joined-up thinking between institutional practitioners and scholars working on graduate attributes as part of teaching quality enhancement, and international researchers informing our understanding of the role of higher education in learning cities and rural regeneration.

Exploring student engagement in quality enhancement

We need robust research into the optimal conditions for student engagement in quality enhancement, and into the relationship between student engagement in quality enhancement and improved learning outcomes. Despite the adoption of student representation as a central tenet of quality (Little and Williams, 2010; QAA, 2014), there is no consensus on how well students are engaged with this process. Student representation here refers to student involvement in quality assurance processes through working as consultants during expert visits and in periodic review of programmes. There are varying levels of student engagement in quality assurance in European universities, which reflect different European traditions and cultural values (ENQA, 2006). Currently, researchers hold different perceptions of the effect of quality assurance mechanisms based on student engagement to influence student learning. (Rauhvargers *et al*, 2009; Coates, 2005; Shavelson, 2010). Gvaramadze (2011) argues, however, that the effectiveness of student participation in the Scottish quality enhancement model goes beyond mere representation in quality assurance processes. Involving students in processes designed to improve the quality of teaching and learning in this case resulted in evidence that institutional teaching and learning strategies should be more effectively designed to: address enhancement of learning experiences; develop students as autonomous learners; ensure greater attention to setting virtual learning environments and support student engagement (Gvaramadze, 2011).

Engaging learning analytics ethically

Learning analytics are a key emerging technology that assists with

‘deciphering trends and patterns from educational big data, or huge sets of student-related data, to further the advancement of a personalized, supportive system of higher education.’ (Johnson *et al*, 2013). Rapid advances in technology and the attendant generation and curation of data about student learning, engagement, and satisfaction have arisen alongside and out of the growth in learning analytics. Data mining course management software to identify and target interventions for retention and progression is a form of quality enhancement increasingly used by institutions that can afford the resource investment (Baepler and Murdoch, 2010; Osborne *et al*, 2014). Gathering large data-sets with the intention of personalising student learning is becoming a core discussion within quality enhancement. The use of learning analytics is viewed by its advocates as central to improving students’ performance (Osborne *et al*, 2014). Such analytics themselves raise a series of research questions about quality enhancement, including two central issues:

Can learning analytics as they are currently evolving genuinely address the acknowledged practical difficulties of associating educational outcomes in a variety of relevant categories (learning gains, social integration, and perception of satisfaction) with the enhancement of learning and teaching regimes and practices? And can they do so in an ethical way? At the moment use of data within quality enhancement tends to be a form of retrofitting evidence that is being collected for other purposes. What needs to change to ensure quality systems predicated on enhancement play a role in the design of learning analytics’ instruments, and to ensure due attention to the ethical dimensions of this approach?

Will the emergence of learning analytics lead to the metrication of quality assurance and what will this mean for quality enhancement? For example, as governments grow in confidence with respect to learning analytics, pressure to effectively quantify (rather than adequately qualify) impact from investment might change the sentiment and type of the evidence which institutions are expected to deliver. There might also be performance paradoxes in terms of academics’ interaction with learning analytics, as seen in other areas of higher education when quantitative indicators have replaced qualitative ones (Frost and Brockmann, 2014).

Managing changes in governance emerging from technological innovation

Changes produced by the use of technology within the university sector

are rapid and unstable. Arguably, technology helps to bring the perspectives of a more diversified student body onto campus and may diminish interest in residential education. This structural change will affect quality assurance processes and academic governance: it requires new ways of thinking and decision-making within institutions to encourage academics to lead online initiatives and maintain and improve the quality of teaching and learning in a sustainable way (Bowen, 2013). Research and policy are needed to explore what is needed for quality enhancement with respect to technology-based improvements to learning and teaching, and explore the optimal conditions for the management of corporate and academic decision-making with regards to quality enhancement. As Bowen (2013) notes, technology might offer shared governance structures which leave corporate decisions in the hands of trustees and/or professional administrators and academic decisions in the hand of academics, but this split is operationally disruptive. This may be especially the case for quality, if the binary of assurance/enhancement plays out with assurance being viewed as the preserve of the former and enhancement the latter. If quality assurance and enhancement should be intrinsically linked, how can they be managed, if technological innovation creates divisions in organisational decision-making?

Conclusion

To summarise, this paper argues for the promotion of learning and teaching rather than process based quality enhancement, with a better balance between accountability and improvement. Enhancement theme activity suggests that we need a renewed conceptual framework that co-locates and balances audit and enhancement. Quality enhancement works as a dialogue between local teaching and learning needs and broader societal ones, within a quality approach which is also concerned for research impact. And quality enhancement facilitates student-led engagement with students' curricular and development needs. Quality processes are currently limited in their capacity to promote change in learning outcomes that crosses the divide between immediate disciplinary educational needs and broader societal ones. A new balance between assurance and enhancement would aim to reconcile ways of thinking (specialist and generalist) generated by higher education, knowledge structures emerging in research communities within the universities, and methods of enhancing learning and teaching which enable a degree of student-led demand (Campbell and Carayannis, 2012).

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